UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAY 22 1987

5HR-11

Mr. Robert L. Thompson
Analytical & Biological Laboratories, Inc.
29079 Ford Road
Garden City, Michigan 48135

Dear Mr. Thompson:

Thank you for your recent letter that included a general field monitoring protocol revision. One of my staff members tried calling you the week of May 11, however he was not able to contact you. The purpose of this letter is to let you know that we will schedule our FIT contractor when you give us the date of your next field activity. We only request that you give us a minimum two week notice before the date you want FIT present. Please contact me at (312)886-0408 once your field date has been determined.

Sincerely yours,

Steve Ostrodka, Chief
Technical Support Unit

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Analytic & Biological
Laboratories, Inc.

29079 FORD ROAD ■ GARDEN CITY, MICHIGAN 48135 ■ PHONE: (313) 422-7474 ■ TELEX: 234080

April 21, 1987

United States Environmental Protection Agency
Region 5
230 South Dearborn St.
Chicago, Ill 60604
Attn: 5HR-11

Dear Mr. Ostrodka,

Thank you for your recent reply concerning the proposed sampling of the Walker Landfill site in Southeastern Michigan. In reply to your concerns about the sampling protocol I have enclosed a summary of our field monitoring protocol, along with a list of parameters to be measured at the Walker Landfill site as well as the South Macomb Disposal Authority (SMDA) site.

Concerning inorganic analysis, a Whatman #1 filter with a particle retention of 11 um will be used for all analysis. The SMDA site contains 16 monitoring wells while the Walker Landfill site has only three monitoring wells. Analytic & Biological Laboratories has monitored the SMDA site. However, it is the relationship between the Walker and SMDA site that is of particular interest here. As such, the most useful data set would be generated by monitoring both sites as close to the same time as possible. We propose monitoring the Walker Landfill as soon as possible, and then setting up a regular quarterly schedule for monitoring both sites simultaneously. For this project we had proposed running one duplicate and one field blank for each monitoring event, however running two duplicates, and two field blanks, perhaps one each from the Walker site and the SMDA site would present no problem. Once background data from the Walker site has been established, we will continue with the policy of measuring monitoring wells in order of least to most contaminated, as we presently do with the SMDA site. Since the use of acetone as a

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rinsing agent when measuring volatiles is objectionable, the use of a dilute solution of trisodium phosphate, followed by a copious rinsing with distilled water is proposed. At your discretion, we would be happy to split samples with E & E whenever desired.

Sincerely yours,

Robert L. Thompson

Robert L. Thompson
Supervisor of Enviromental Monitoring

RLT/sjk
cc: files

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FIELD MONITORING PROTOCOL

Personnel from Analytical and Biological Laboratories of Garden City, Michigan perform all sampling protocols with strict adherance to QA/QC guidelines, as recommended by the EPA and Michigan Department of Natural Resources. The optimization of two goals are considered at all times:

A.) The collection and maintenance, until analysis, of represenative samples from each site.
B.) Maximum standardization of procedure, so that valid comparisions may be made across time and location.

More specific procedures are outlined below.

A.) Preparation and Transportation of materials
1.) All equipment and sample containers are thoroughly cleaned before field use.
2.) Sufficient cooling chests are maintained within field vehicle for cold transportation of samples.
3.) EPA preservation techniques are followed, and samples are pre-labelled as completely as possible.

B.) Sampling procedures
1.) Static water levels are always measured before sampling proceeds, using a droplight water level indicator.
2.) Water is evacuated from each well using a Keck submersible sampling pump. If a well runs dry before 3 to 5 volumes of water are purged the well is allowed to replenish and a subsequent sample is taken using a teflon bailer.
3.) If volatiles or organics are to be sampled the teflon bailer is used to collect samples. The bailer is given a distilled water - acetone - distilled water rinse between monitoring wells, and is acclimated several times to each well.
4.) All equipment which contacts the interior casing of a well is thoroughly rinsed with distilled water between monitoring wells. A Keck aluminum cleansing casing is used to flush the submersible sampling unit.

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C.) Measurement of Field Parameters

1.) After sample collection temperature is measured with a clean mercury thermometer, and pH is measured eletrometrically. The pH meter is standardized with the electrodes immersed in a buffer solution with a pH approaching that of the sample, and checked against another buffer solution with a pH of approximately 4 units different from the first. In the measurement of conductivity, the conductivity cell is standardized against a 0.0100 M KCl solution, after rinsing with same. The sample conductivities are then measured with temperature taken into account. In addition, the appearance odor, and color of the samples are noted when taken.

D.) Quality Control

1.) A duplicate is run for all parameters for a randomly chosen monitoring well each time samples are taken.

2.) A distilled water blank, with preservatives, is run each time samples are taken.

3.) To monitor any cross contamination that may be occuring between wells a field blank will be run sometime during each sampling period, using distilled water.

4.) Strict chain of custody protocol will be followed throughout.

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LIST OF PARAMETERS

Cadmuim, Diss.	Nitrogen, Ammonia
Calcuim, Diss.	Nitrogen, Nitrate
Chromium, Diss.	Nitrogen, Nitrite
Iron, Diss.	pH
Lead, Diss.	Phenols
Magnesium, Diss.	Sodium, Diss.
Alkalinity	Sulfate
Chloride	Total Organic Carbon
C.O.D.	Purgeable Halocarbons - 601
Conductivity	Purgeable Aromatics - 602

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April 9, 1987

U. S. EPA
5HR-11
230 S. Dearborn
Chicago, ILL 60604
Attn: Steve Ostrodka

Dear Mr. Ostrodka:

Recently I wrote you a letter concerning the acquisition of keys for locks on monitoring wells at the Walker Landfill site, Southeastern Michigan. It is crucial that these wells be monitored as soon as possible, in the context of defining the upgradient groundwater quality of the SMDA/Walker Landfills. The seperate impact of each landfill and the quality of effluent groundwater must be determined. I would appreciate any help or advice you could offer concerning this matter.

Sincerely,
ANALYTIC & BIOLOGICAL LABORATOIRES, INC.

R. L. Thompson

Robert L. Thompson
Supervisor of Environmental Monitoring

RLT/sjk
cc: files

APR 10 1987

5HR-11

Mr. Robert L. Thompson
Analytical & Biological Laboratories, Inc.
29079 Ford Road
Garden City, Michigan 48135

Dear Mr. Thompson:

Thank you for your recent letter that included a general field monitoring protocol. We have arranged with our contractor Ecology and Environment, Inc. (E&E) to be present when you sample our wells on the Walker Landfill site. However, prior to E&E being able to oversee your work, we need a field monitoring protocol that is in sufficient detail to provide E&E with some guidelines. The goals of the protocol that you enclosed, as well as the specific procedures, are clearly presented, and in general, are consistent with our agency sampling procedures. I have a few comments that should be incorporated. However, the nature of the comments are limited because the constituents to be analyzed are not specifically stated.

1. The portocols do not mention if field parameters (pH, Temperature, Specific Conductivity, etc.) are to be taken. These parameters can sometimes help interpret the analytical data later. The calibration procedures should be outlined.

2. No indication is given whether inorganics are to be analyzed. If they are, will the samples be filtered, unfiltered or both. The filtration procedures should also be specified.

3. The protocol does not specificially say that the organic and inorganic samples should be iced as soon as possible.

4. The number of total sample sets are not specified, however, if the number of sets is greater than ten, we run one duplicate for each set of ten samples.

5. The same frequency for field blanks is also followed and the type of water used for field blanks should also be specified.

6. Because bailers can volatilize some contaminants when the sample is pored into the VOA bottle, we suggest using a bottom emptying device when possible.

7. If volatile organics are a constituent of primary concern, the use of acetone in rinsing bailers between sample locations is generally not recommended. Sometimes a detergent may be preferable.

I hope these comments may have been of some use to you. They are not meant to be exhaustive. In all Superfund sites, we are required to develop a specific Quality Assurance Project Plan (QAPP) that has a higher degree of detail than you have outlined here. When the applicable comments are incorporated into your field protocol, please foward a copy of them to me. Following receipt of the revised protocol, we will arrange a mutually agreeable field date for your staff and E&E. I would also like to mention that we may have E&E grab a split field sample if we deem that it may be necessary.

If I can be of any further assistance please do not hesitate to call me at (312) 886-3011.

Sincerely yours,

Steve Ostrodka, Chief
Technical Support Unit

YESKIS:mdt:TSU:3/30/87 Doug's disk #2

4/10/87

Analytic & Biological
Laboratories, Inc.

29079 FORD ROAD ■ GARDEN CITY, MICHIGAN 48135 ■ PHONE: (313) 422-7474

March 10, 1987

Steve Ostrodka
US EPA
5HR-11
230 S. Dearborn
Chicago, IL 60604

Dear Mr. Ostrodka:

Analytic and Biological Laboratories, of Garden City Michigan, has been contracted by Washington Township to monitor and analyze groundwater samples from the South Macomb Disposal Authority (SMDA) and Walker Landfill sites on a quarterly basis. The Walker Landfill site monitoring wells are locked, and the keys are not currently available to us. We do, however, have access to the SMDA monitoring wells.

On February 26 and 27 we sent a field crew to the SMDA site, unaware that there was not on-site availability to the Walker monitoring wells. Samples from these wells were taken, and it is important that we monitor the Walker site as soon as possible.

I have enclosed our general field monitoring protocol for your inspection. I look forward to hearing from you in regard to the above issues as soon as possible.

Sincerely,
ANALYTIC & BIOLOGICAL LABORATORIES, INC.

Robert L. Thompson

RLT/kg

cc: files

FIELD MONITORING PROTOCOL

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